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Federal Communications Commission
1270 Fairfield Road
Gettysburg, PA 17325

10 February 2003

RE: Alliant Energy Comments on PWC 800 MHz Compromise Plan and
NPRM WT DOCKET NO. 02-55

To whom it may concern:

Alliant Energy is the holding company of Interstate Power and Light Company (IP&L) and Wisconsin Power and Light (WP&L). IP&L provides electric, gas and steam services in Iowa, Minnesota and Illinois. WP&L provides electric, gas and water utility services in Wisconsin. Both subsidiaries have significant operational and financial investments in their 800 MHz wide-area private radio systems, which are operated over more than 120 sites covering over 75,000 square miles, most of it rural service territory.

In response to Commission's request for comments by February 10th, 2003, this letter, and its attachment, serves as Alliant Energy's Comments related to NPRM 02-55 and the Private Wireless Coalition's (PWC) most recent supplemental comments on their "Consensus" Plan proposal.

In addition to Alliant Energy's Comments covered herein, Alliant Energy supports United Telecom Council's (UTC) current position and stance as stipulated in their most recent NPRM 02-55 comments to be filed by February 10, 2003.

Alliant Energy's own concerns with the "Consensus" Plan are outlined below and are discussed in further detail in the "ALLIANT ENERGY COMMENTS, PWC "CONSENSUS" PLAN AND NPRM WT DOCKET NO. 02-55, 2/10/03" attachment:

- Alliant views all versions of the PWC Plan and proposed re-banding to be an extreme, unnecessary and legally complicated regulatory effort that will create unnecessary interruption of service and heavy expense.
- The catalyst for these proceedings, and the original problem in need of resolution, stemmed from the need to resolve geographically isolated interference problems between high profile incumbents.

- Re-banding is NOT needed to resolve these geographically isolated interference problems.
- Instead, Alliant respectfully requests the FCC mandate and enforce the use of best practices and technological solutions along with a market-based approach of frequency “trading” to resolve interference without involving other licensees.
- While the PWC Plan may represent to be a proposal by a majority of the 800 MHz band, Alliant believes the broadest cross-section of 800 MHz users is NOT represented.
- The PWC’s efforts and the current “Consensus Plan” have systematically migrated towards an improper means in which to negotiate and acquire spectrum for these participants.
- Of the parties involved in the PWC proposal, most stand to gain spectrum, financial compensation and/or cost avoidance from this plan. This is indicative as why they formed the coalition.
- The PWC Plan affords Nextel an unfair advantage over other commercial wireless carriers.
- The PWC’s revised “offer” to grandfather SouthernLinc’s system directly conflicts with their original stance on the need for re-banding (to solve interference) and, it has the appearances of attempting to quiet a vocal opponent by way of bargaining spectrum.
- It is questionable that the relocation funding for the PWC proposal will suffice or be guaranteed. What happens to the re-banding effort if the money runs out?
- The RCC represents a conflict of interest and an unfair advantage for some parties. The formation of the RCC to carry out the FCC’s Rule and Order is concerning due to its potential make up and the possible precedence of having a commercial, for-profit entity (i.e. Nextel) involved in administering public policy.
- The PWC proposal only permits non-Public Safety to move out of the Guard Band without conditions.
- Alliant has great concerns about possible interference they may experience in the 859-861 MHz Guard Band. Public safety is being formally protected from interference by the PWC Plan, however, all 800 MHz licensees, including Alliant, are also entitled to operate free of interference and should not have to serve as a buffer.
- The FCC must provide measures to preserve the ability to meet current and future spectrum needs of Critical Infrastructure (CI), including Utilities. The possible separation of Critical Infrastructure/Utilities (to 900 MHz) and Public Safety (to 700 MHz) conflicts with the need to develop joint systems and communications in support of the public’s safety and well-being.
- The strategy of relocating B-I/LT to 900 MHz on a voluntary basis will be an unreliable, haphazard way to regain 800 MHz spectrum. Without a comprehensive portfolio of equipment to choose from at 900MHz and the same common bandwidth denominators, very few incumbents will be able to relocate.
- This PWC plan does not adequately address the unique demographic differences and regional nature of Utility radio systems.
- The PWC proposed band “freeze” and licensing process during re-banding are unrealistic and will cause extreme backlogs and delays for even for parties not relocating.

- Enacting the PWC plan will compromise Alliant Energy's 800 MHz system operation and risk the health and safety of its workers and customers. Alliant is in the process of redesigning and rebuilding its 800 MHz radio system. Any re-banding and related band "freeze" will leave almost half of its multi-state territory unable to be converted due to inability to acquire frequencies.

Alliant Energy respectfully submits these Comments for the Commission's consideration. If you have any questions, please contact me at the phone number and address listed below.

Thank you for your time and consideration in this matter.

Sincerely,

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W/attachment

ALLIANT ENERGY COMMENTS
PWC “CONSENSUS” PLAN AND NPRM WT DOCKET NO. 02-55
2/10/03

There is No Need to Re-band 800 MHz

The catalyst for the 02-55 proceedings and the original problem in need of resolution, stemmed from the need to resolve geographically isolated interference problems between high profile incumbents. Re-banding is not needed to resolve these interference problems.

- 1) Alliant acknowledges interference problems are real and a chronic concern, however, the problems are still isolated to highly congested areas and do not affect many licensees.
- 2) The FCC should conduct an independent study of the interference claims before imposing any relocation and re-banding solution.
- 3) While Alliant agrees any FCC ruling must address eliminating interference between high-power, low-site transmissions and low-power, high-site receivers, the PWC Plan does not go far enough and only addresses “cellularized” site restrictions as a secondary solution to re-banding.
- 4) It is important to remember that the crux of the issue originates with Nextel. These NPRM 02-55 proceedings are in response to Nextel’s original proposal to restructure the 800 MHz band to cure interference problems primarily caused by their system(s). Their aggressive inter-category, waiver licensing of the 1990’s and subsequent system design and deployment are at the heart of this matter. The PWC Plan’s main focus is to implement a broad, over-reaching re-banding solution that only removes the responsibility of Nextel to resolve its specific interference problems.
- 5) Most recently in the PWC updated proposal, the PWC themselves propose the contradictory grandfathering of SouthernLinc’s system, which allows SouthernLinc to continue build out “cellularized” systems, pending notice of near by incumbents and prevention of interference. If it is good enough for SouthernLinc, then why not for Nextel and the rest of the 80MHz users?
- 6) The mandated and enforced use of best practices and technological solutions are still a legitimate option to resolve these geographically isolated interference problems. The FCC should establish rules and processes to:
 - a) Require the use of cavity filters to prevent inter-modulation and spurious emissions.
 - b) Tighten standards on emissions masks.
 - c) Define receiver standards that supports the “Class A” standards in TIA/EIA-603-A
 - d) Catalog and identify potential sources of interference.
 - e) Clarify the methods and responsibilities of each party to resolve interference.
 - f) Establish timelines and arbitration to ensure resolution of interference.
- 7) In addition, flexible licensing rules and a market-based approach to govern the trading of frequencies would also provide the most inexpensive and effective means to resolve interference without involving other licensees.

Utilities as Critical Infrastructure Are Being Overlooked

Critical infrastructure (CI) and Public Safety Agencies are being unduly segregated with regards to the latest licensing and 800 MHz re-banding discussions.

- 1) The FCC must provide measures to preserve the ability to meet current and future spectrum needs of Critical Infrastructure, including Utilities.
- 2) The recent PWC plan and climate at the FCC would indicate that discussions of public safety/security exclude Utilities. This is not acceptable.
 - a) Utilities maintain CI in the form of electric and gas facilities, which are integral to the support of the public's safety and well-being.
 - b) The performance of Utility workers and the availability of electric and gas system are directly impacted by any compromise in the 800 MHz radio systems that support them. Utility radio systems are part of CI and are as important as Public Safety radio systems.
 - c) **Both** public safety and critical infrastructure licensee's need adequate, adjacent, interference-free spectrum to ensure reliable communications during states of emergency.
 - d) The PWC Plan would have the majority of B-I/LT users, including Utilities, move to 900 MHz. This would place many Utilities further separated from Public Safety and make the opportunity of joint-agency or mutual aid system limited due to frequency and equipment differences.
- 3) While frequency coordinators, public safety agencies and Nextel are representing the interests of "public safety, other critical infrastructure communications systems, such as those operated by Utilities, are hurt by the PWC Plan and re-banding.
- 4) The FCC should also get direct feedback from the Department of Homeland Security as to the importance of Utilities in maintaining security and safety of the public.

The PWC Plan is Faulty

- 1) Alliant believes the PWC Plan does not represent the majority and broadest cross-section of 800 MHz users. As such, Alliant and other B-I/LT system operators would be hurt from re-banding.
 - a) Alliant respectfully requests the FCC review the true statistics of the number of licensees represented by the PWC. While the PWC coalition may appear, by way of organized efforts in filing and lobbying, to be a coalition of the 800MHz band users. It is NOT.
 - b) Please reference the "Alliant Energy's 800 MHz System is at Risk" bulleted section below to read how re-banding would impact Alliant's system, as an example Utility.

- 2) Alliant believes there are many procedural, competitive, legal and ethical issues with the PWC proposal that will likely lead to complicated legal proceedings.
- a) The PWC efforts and current “Consensus Plan” have systematically migrated towards an improper means in which to negotiate and acquire spectrum for its participants.
 - b) Of the parties involved in the PWC proposal, most stand to gain spectrum, financial compensation and/or cost avoidance from this plan.
 - c) Only one commercial wireless company stands to benefit from the PWC Plan.
 - i) Nextel stands to gain an unfair advantage over other commercial wireless carriers by acquiring a nationwide, contiguous block of replacement spectrum. It is doubtful that the relocation cost reimbursement funding to be supplied by Nextel will be adequate And/Or a fair and equitable “trade” for the contiguous spectrum they will receive.
 - ii) Clearly, at minimum, there has been an attempt at negotiations, of sorts by the PWC, to trade spectrum and dollars under the “reasoning” of protecting critical public safety incumbents that are prone to interference.
 - d) The fair market value of a blanket plan for inter-band spectrum trading cannot be accurately and equitably calculated.
 - i) This due to variations in spectrum use and its assigned distribution/density. Specifically, the value between “channelized” and contiguous spectrum, along with the differences in use between private for the public interest and commercial for profit uses, carry different values.
 - ii) To Public Safety and Critical Infrastructure, spectrum is considered priceless, and as such, the FCC controls it and grants it when the spectrum is justified. However, commercial, for-profit, licensees are subject to competitive bidding requirements of Section 309(j).
 - iii) It is unclear how the FCC can entertain implementing the PWC Plan’s financial attributes without the FCC truly negotiating with the Nextel (visa-vi the PWC Proposal) and not violate Section 309(j).
 - e) The most recently revised PWC proposal presents the option for SouthernLinc to be grandfathered, allowing them to keep their existing channels and system architecture. This directly conflicts with the PWC’s original stance of re-banding and negates Nextel’s argument that it cannot solve its interference violations without re-banding. This latest offering has the appearance of dangling a spectrum “carrot” in an attempt to quiet a vocal opponent.
 - f) The formation of the RCC will represent a conflict of interest and an unfair advantage.
 - i) If the 5-member RCC is comprised a majority of PWC members, there will be significant concerns that there will be a conflict of interest.
 - ii) If Nextel is part of RCC this will set a precedence of having a commercial, for-profit entity involved with managing public policy and procedures. In addition, significant steps would need to be taken to ensure Nextel does not leverage its position on the RCC as a platform to sell/promote Nextel services to licensees.
 - iii) More importantly, depending on the make up of the RCC, Utilities and other B-I/LT users risk being out-voted and over-ruled by original PWC members and their interests when conflicts arise.
 - iv) Also, the RCC’s system inventory process poses significant risk to each private agency’s system information and its security. It is not clear how this information can be protected and not become available to unqualified parties.

- 3) It is questionable that the relocation funding for the PWC proposal will suffice or be guaranteed.
 - a) The \$700M for Public Safety and \$150M for B-I/LT that is to be “guaranteed” by Nextel is most likely not enough money to relocate incumbents.
 - b) When considering the relocation of users to another frequency band, such as B-I/LT to 900 MHz, the \$150M to be supplied by Nextel is not enough to cover the infrastructures of more than a few Utility systems the same size or larger than Alliant’s system. Alliant Energy’s 800 MHz system, alone, could cost over \$60M to replace.
 - c) If the \$850 Million Nextel has committed to move licensees will not be enough, where will the additional funding come from for those who need to relocate?
 - d) What is the FCC’s ability to enforce Nextel to pay the \$850 Million? Is there a scenario in which Nextel may not accept the FCC’s final ruling, possibly appealing and thus causing possible delays in the relocation efforts and payments?
 - e) It is not clear how the PWC Plan affects Nextel affiliates. The FCC should consider the far-ranging system makeup of the “Nextel System” and how these affiliates are germane and accountable to any final frequency and financial/payment agreements.
 - f) What happens to the re-banding effort if the money runs out? Who will still be compelled to relocate and how? Who will pick up the pieces and manage the process?
- 4) This PWC plan does not adequately address the unique demographic makeup and regional nature of Utility Radio Systems.
 - a) Utility radio systems, including Alliant Energy’s, resemble large regional coverage footprints encompassing both Metro and Rural territory over multiple States.
 - b) The planning and development of Utility frequency plans have been complicated and have taken significant time to coordinate.
 - c) Many of the PWC proponents operate much smaller, geographically-centralized systems. These also include the railroad and petroleum industries, which mainly have to worry about “ribbon” and/or “island” type system designs and frequency plans.
- 5) The proposed licensing process and proposed band “freeze” during re-banding is unrealistic and will cause extreme backlog and delays even for those not relocating.
 - a) Alliant has serious concerns if the proposed implementation of the PWC can be completed. The proposed time lines are very aggressive with a lot of up front coordination being required.
 - b) In addition, the 5-year “preferential” period, for Public Safety agencies to apply for vacated spectrum is too restrictive. Alliant also requests the FCC consider a predefined, public notice, waiver process for eligible parties to request this spectrum.
 - c) A band “freeze” and/or, the 5-year “preferential” period will pose an intolerable restriction on B-I/LT users that wish to upgrade/change their systems, especially those needing to move out of the Guard Band to avoid interference instead of moving to 900 MHz.
 - d) In the PWC’s most recent proposed plan, there is call for an immediate 800 MHz band “freeze” to be instituted for approximately 2 years. Alliant requests the FCC not “freeze” the 800 MHz band, especially the eligible and remaining B-I/LT frequencies. This would prevent Alliant and other incumbents from modifying and expanding their systems.

- 6) The Relocation strategy of moving B-I/LT to 900 MHz is a questionable way to free up 800 MHz spectrum.
 - a) Incentives and aggressive timeline to “volunteer” may increase spectrum speculation and pose risk to any re-banding effort.
 - b) While it is apparent that the need to know who is willing to move must be established in order to make a 900 MHz spectrum allocation work. The 60 day notification of intent” deadline after R&O is very short for incumbents to review design and equipment option and then commit to such an important business decision.
 - c) Intent will be up for interpretation and will most likely result in speculation. The conditions on the incentives and the two very different avenues that a party could pursue to get spectrum for incumbents makes it difficult to predict the allocation of the spectrum.
 - d) Equipment and system applications are not necessarily available or the same at 900 MHz as they are at 800 MHz.
 - i) Depending on technology, some users may require contiguous spectrum to have enough bandwidth to operate properly. Contiguous 12.5 KHz channels to replace one 25 KHz channel will complicate channel plans and reuse.
 - ii) Like performance and coverage based on site-for-site overlay of new frequencies will not be the same. This may require additional site licensing, etc.
 - e) Volunteers can get all channels upfront by forgoing relocation cost. What guarantees are there that an incumbent will get the “Bonus” channels after the completion of Phase II (42 – 48 months)? What legal rights will they have if they don’t?

Alliant Energy’s 800 MHz System is at Risk

Alliant Energy’s 800 MHz system operation will be compromised now and into the future if the proposed re-banding is enacted.

- 1) Alliant has great concerns about possible interference they may experience in the 859-861 MHz Guard Band.
 - a) Alliant was assigned frequencies in this Guard Band many years ago as part of it’s legacy systems.
 - a) Only Public safety is being formally protected from interference. All 800 MHz licensees are entitled to operate free of interference and should not have to serve as a buffer.
 - b) The PWC proposal only permits non-Public Safety to move out of Guard Band under the following conditions:
 - i) After submitting to a review by the RCC and getting approval.
 - ii) Only to B-I/LT frequencies that are currently vacant, which are already limited. B-I/LT frequencies vacated by Nextel will not be available.
 - c) Even if the move were due to interference, Alliant would have to pay for the relocation.
- 2) Alliant Energy uses its 800 MHz systems for all of its critical business communications to ensure the health and safety of its workers and customers.

- 3) To improve its system performance and reliability, Alliant is in the process of redesigning and rebuilding its 800 MHz radio system to migrate to Motorola's private digital, wide-area system called iDEN.
- 4) Alliant Energy, so far, has over \$60M of assets tied up in improving its 800 MHz wireless voice and data operations for its workers and in support of its electric and gas customers.
- 5) While this effort in the end will increase spectrum efficiency, Alliant faces many frequency planning and site licensing challenges. As is evident with such an architecture change, many more sites are required to be built and licensed to provide the same reliable coverage that was once provided by the simpler analog mobile/repeater systems.
- 6) Any re-banding and related band "freeze" will leave almost half of Alliant's territory unable to be converted due to restrictions on licensing frequencies. This will in effect stop our system deployment dead in its tracks and kill our efforts to implement a completed multi-state regional system.
- 7) Alliant is not alone in making a conversion to a more advanced digital system. The FCC should address the negative impact re-banding will have on licensing and deployment of future private digital, wide-area systems, such as private iDEN.